

Amendments to the Specification:

Please replace Paragraph 64 with the following paragraph, as follows:

[0064] Western blots were performed on transgenic lines containing the two different constructs. Full length 83-kDa polypeptide was detected on blots, confirming PA expression in transgenic lines and absence of unique proteases that cleave PA in plant cells (see Figures 3A-C). Presence of active furin or trypsin-like proteases would have resulted in a 63-kDa protein due to cleavage at the sequence RKKR (SEQ ID NO:1) (amino acids 164-167). The sequence FFD (SEQ ID NO:2) at residues 312-314 is another site that is highly sensitive to chymotrypsin-like enzymes, and cleavage would have resulted in 47- and 37-kDa fragments. No other cleaved PA products were observed (see full length blots shown), demonstrating stability of chloroplast derived PA. Prior to the Applicant's discovery, it was widely believed that proteases would cleave long antigenic bacterial peptides, but this invention illustrates that the antigenic bacterial peptides are free from proteolytic degradation.